Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A m~~M~~ethod to secure an electronic assembly implementing a calculation process, ~~characterised in that it~~ the method comprising: ~~consists in~~

performing an additional calculation by a verification function on at least one intermediate result in order to obtain a calculation signature;

performing an elementary operation using a *super-function* operation acting from and/or to a larger set wherein a function f' is *super-function* of a function f if $h_2(f'(h_1(x))) = f(x)$ wherein h_1 is a one-to-one mapping between a set E and a set E' and h_2 is an onto mapping of a set F' and a set F, wherein x is a member of E and f(x) is a member of the set F; and

performing the calculation by the verification function using the result obtained by the super function in order to obtain the calculation signature.

2. (Currently Amended) The m~~M~~ethod according to claim 1, ~~characterised in that it consists in~~ wherein the method further comprises:

performing at least once more all or part of the calculation in order to recalculate said signature and compare them in order to detect a possible error.

3. (CANCEL)

4. (Currently Amended) The m~~M~~ethod according to claim ~~3~~ 1, ~~characterised in that~~ wherein the calculation of the elementary operation can be ~~found~~ recomputed using the calculation of the super-function.

5. (Currently Amended) The m~~M~~ethod according to claim ~~3 or 4~~ 1, ~~characterised in that~~ further comprising ~~an elementary operation f of E in F is replaced by an operation f' of E' in F' where~~

~~E' and F' are super-sets of E and F;~~

~~Move~~ move from E to E' by one-to-one function h_1; and

~~Move~~ move from F' to F by onto function h_2;

wherein h1 and h2 are mappings such that for any element x of E ~~we have~~ the following equality is true:
$h_2(f'(h_1(x)))=f(x)$.

6. (Currently Amended) An e~~E~~lectronic assembly secured from differential attack and comprising ~~storage means of~~ a calculation process processing means ~~of said process~~ , ~~characterised in that it includees~~ wherein the electronic assembly comprises storage means for storing instructions to cause the calculation processing means to execute ~~of~~ a verification function used to perform an additional calculation on intermediate results in order to obtain a calculation signature thereby securing the electronic assembly from differential attack; and

wherein the calculation process comprises:~~,~~

performing an additional calculation by a verification function on at least one intermediate result in order to obtain a calculation signature;

performing an elementary operation using a *super-function* operation acting from and/or to a larger set wherein a function f’ is *super-function* of a function f if $h_2(f'(h_1(x))) = f(x)$ wherein h_1 is a one-to-one mapping between a set E and a set E’ and h_2 is an onto mapping of a set F’ and a set F wherein x is a member of E and f(x) is a member of the set F; and

performing the calculation by the verification function using the result obtained by the super function in order to obtain the calculation signature.

7. (CANCEL)

8.(Currently Amended) A s~~S~~mart card comprising storage means of a calculation process, processing means of said process, ~~characterised in that it~~ wherein the smart card includes storage means of a verification function used to perform an additional calculation on intermediate results in order to obtain a calculation signature; and

wherein the calculation process comprises:~~,~~

performing an additional calculation by a verification function on at least one intermediate result in order to obtain a calculation signature;

performing an elementary operation using a *super-function* operation acting from and/or to a larger set wherein a function f’ is *super-function* of a function f if

$h_2(f'(h_1(x))) = f(x)$ wherein h_1 is a one-to-one mapping between a set E and a set E' and h_2 is an onto mapping of a set F' and a set F wherein x is a member of E and f(x) is a member of the set F; and

performing the calculation by the verification function using the result obtained by the super function in order to obtain the calculation signature.

9. (New) The method according to claim 2, wherein the calculation of the elementary operation can be recomputed using the calculation of the super-function.